| FORM PTO-1449 (modified)                      |             | Atty. Ref. No. 072377-0372585 |                      |
|-----------------------------------------------|-------------|-------------------------------|----------------------|
| SUPPLEMENTAL INFORMA<br>STATEMENT BY APPLICAN |             | Applicant: HEIFE              | TZ, et al.           |
|                                               |             | Application No.: 1            | 0/625,648            |
|                                               |             | Filing Date: July 2           | 23, 2003             |
| Date: November 13, 2009                       | Page 1 of 4 | Examiner:<br>LUNDGREN         | Group Art Unit: 1639 |

| Examiner  |       | Document    | Date    | Name      |                        |                     |                                     |
|-----------|-------|-------------|---------|-----------|------------------------|---------------------|-------------------------------------|
| Initials* |       | Number      | MM/YYYY | (Family I | Name of First Inventor | r)                  |                                     |
|           | D1    | 4,761,373   | 08/1988 | Anderso   | n                      |                     |                                     |
|           | D2    | 4,975,374   | 12/1990 | Goodma    | n                      |                     |                                     |
|           | D3    | 5,162,602   | 11/1992 | Somers    |                        |                     |                                     |
|           | D4    | 5,539,092   | 07/1996 | Haselko   | rn                     |                     |                                     |
|           | D5    | 5,545,818   | 08/1996 | McBride   |                        |                     |                                     |
|           | D6    | 5,554,798   | 09/1996 | Lundquis  | st                     |                     |                                     |
|           | D7    | 5,605,793   | 02/1997 | Stemme    | r                      |                     |                                     |
|           | D8    | 6,084,155   | 07/2000 | Volrath   |                        |                     |                                     |
|           | D9    | 6,177,245   | 01/2001 | Ward      |                        |                     |                                     |
|           | D10   | 6,282,837   | 09/2001 | Ward      |                        |                     |                                     |
|           | D11   | 6,288,306   | 09/2001 | Ward      |                        |                     |                                     |
|           | D12   | 6,307,129   | 10/2001 | Ward      |                        |                     |                                     |
|           | D13   | 6,308,458   | 10/2001 | Volrath   |                        |                     |                                     |
|           | D14   | 20020059659 | 05/2002 | Stemmer   |                        |                     |                                     |
|           | D15   | 20020058249 | 05/2002 | Subrama   | anian                  |                     |                                     |
| FOREIGN   | I PAT | ENT DOCUMEN | ITS     |           |                        | English<br>Abstract | Translation<br>Readily<br>Available |
| Examiner  |       | Document    | Date    | Country   | Inventor Name          |                     | Zvallabie                           |
| Initials* |       | Number      | MM/YYYY |           |                        |                     |                                     |
| *         | D16   | 9706250     | 02/1997 | WIPO      | Maliga                 |                     |                                     |
| *         | D17   | 9720078     | 06/1997 | WIPO      | Stemmer                |                     |                                     |
|           | D18   | 9732977     | 09/1997 | WIPO      | Maliga                 |                     |                                     |
| *         | D19   | 9805765     | 02/1998 | WIPO      | Miyota                 |                     |                                     |

| EXAMINER | DATE       |
|----------|------------|
|          | CONSIDERED |

| FORM PTO-1449 (modified)                        |             | Atty. Ref. No.<br>072377-0372585 |                      |
|-------------------------------------------------|-------------|----------------------------------|----------------------|
| SUPPLEMENTAL INFORMATION STATEMENT BY APPLICANT |             | Applicant: HEIFE                 | TZ, et al.           |
|                                                 |             | Application No.: 1               | 0/625,648            |
|                                                 |             | Filing Date: July 2              | 23, 2003             |
| Date: November 13, 2009                         | Page 2 of 4 | Examiner:<br>LUNDGREN            | Group Art Unit: 1639 |

| OTHER (I | nclud | ling in this order Author, Title, Periodical Name, Date, Pertinent Pages, etc.)                                                                                                                                                                                        |
|----------|-------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|          | D20   | Boynton et al., "Transformation in chlamydomonas with high velocity microprojectiles," <i>Science</i> , 1988, 240: 1534-1537.                                                                                                                                          |
| *        | DZI   | Crameri et al., "DNA shuffling of a family of genes from diverse species accelerates directed evolution," <i>Nature</i> , 1998, 391: 288-291.                                                                                                                          |
|          |       | Dailey et al., "Purification and characterization of murine protoporphyrinogen oxidase," <i>Biochem.</i> , 1987, 26: 2697-2701.                                                                                                                                        |
|          | D23   | De Marchis et al., "Genetic transformation of the sugar beet plastome," <i>Transgenic Res.</i> , 2009 18 : 17-30.                                                                                                                                                      |
| *        | D24   | Dufourmantel et al., "Generation and characterization of soybean and marker-free tobacco plastid transformants over-expressing a bacterial 4-hdyroxyphynylpyruvate dioxygenase which provides strong herbicide tolerance," <i>Plant Mol. Biol.</i> , 2005, 5: 118-133. |
|          | D25   | Dufourmantel et al., "Generation of fertile transplastomic soybean," <i>Plant Mol. Biol.</i> , 2004, 55: 479-489.                                                                                                                                                      |
|          | D26   | Goldschmidt-Clermont, "Transgenic expression of aminoglycoside adenine transferase in the chloroplast: a selectable marker for site-directed transformation of chlamydomonas," <i>Nucleic Acids Research</i> , 1991, 19: 4083-4089.                                    |
|          | D27   | Hou et al., "Chloroplast transformation in oilseed rape," <i>Transgenic Res.</i> , 2003, 12: 111-114.                                                                                                                                                                  |
| *        | D28   | Kanamoto, et al., "Efficient and stable transformation of Lactuca sativa L. cv. Cisco (lettuce) plastids," <i>Transgenic Research</i> , 2006, 15: 205-217.                                                                                                             |
| *        | D29   | Kanevski, et al., "Plastome engineering of ribulose-1,5-bisphosphate carboxylase/oxygenase in tobacco to form a sunflower large subunit and tobacco small subunit hybrid," <i>Plant Physiology</i> , 1999, 119: 133-141.                                               |
|          | D30   | Koop et al., "Integration of foreign sequences into the tobacco plastome via polyethylene glycol-mediated protoplast transformation," <i>Planta</i> , 1996, 199: 193-201.                                                                                              |

| EXAMINER | DATE<br>CONSIDERED |
|----------|--------------------|
|----------|--------------------|

| FORM PTO-1449 (modified)                      |             | Atty. Ref. No.<br>072377-0372585 |                      |
|-----------------------------------------------|-------------|----------------------------------|----------------------|
| SUPPLEMENTAL INFORMA<br>STATEMENT BY APPLICAN |             | Applicant: HEIFE                 | TZ, et al.           |
|                                               |             | Application No.: 1               | 0/625,648            |
|                                               |             | Filing Date: July 2              | 23, 2003             |
| Date: November 13, 2009                       | Page 3 of 4 | Examiner:<br>LUNDGREN            | Group Art Unit: 1639 |

| * | D31 | Kumar et al., "Plastid-expressed betaine aldehyde dehydrogenase gene in carrot cultured cells, roots, and leaves confers enhanced salt tolerance," Plant Mol. Biol., 2004, 136: 2843-2854.                |
|---|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|   | D32 | Kumar et al., "Stable transformation of cotton plastid genome and maternal inheritance of transgens," <i>Plant Mol. Biol.</i> , 2004, 56: 203-216.                                                        |
|   | D33 | Lee et al., "Plastid transformation in the monocotyledonous cereal crop, rice ( <i>oryza sativa</i> ) and transmission of transgenes to their progeny," <i>Mol. Cells</i> , 2006, 21: 401-410.            |
| * | D34 | Lelivelt et al., "Stable Plastid transformation in lettuce (Lactuca sativa L)," <i>Plant Mol. Biol.</i> , 2005, 58: 763-774.                                                                              |
|   | D35 | Liu et al., "Stable chloroplast transformation in cabbage ( <i>Brassica oleracea L. var. capitata L.</i> ) by particle bombardment," <i>Plant Cell Rep.</i> , 2007, 26: 1733-1744.                        |
| * | D36 | Lutz et al., "A guide to choosing vectors for transformation of the plastid genome of higher plants," <i>Plant Physiology</i> , 2007, 145: 1201-1210.                                                     |
| * | D37 | Narita et al., "Molecular cloning and characterization of a cDNA that encodes protoporphyrinogen oxidase of Arabidopsis thaliana," <i>Gene</i> , 1996, 182: 169-175.                                      |
|   | D38 | Nguyen et al., "Generation of homoplasmic plastid transformants of a commercial cultivar of potato ( <i>Solanum tuberosum</i> L.)," <i>Plant Sci.</i> , 2005, 168: 1495-1500.                             |
| * | D39 | Nugent et al., "Nuclear and plastid transformation of <i>Brassica oleracea</i> var. botrytis (cauliflower) using PEG-mediated uptake of DNA into protoplasts," <i>Plant Science</i> , 2006, 170: 135-142. |
| * | D40 | Okumura et al., "Transformation of poplar ( <i>Populus alba</i> ) plastids and expression of foreign proteins in tree chloroplasts," <i>Transgenic Research</i> , 2006, 15: 637-646.                      |
|   | D41 | O'Neill et al., "Chloroplast transformation in plants: polyethylene glycol (PEG) treatment of protoplasts is an alternative to biolistic delivery systems," <i>Plant J.</i> , 1993, 3: 729-738.           |
| * | D42 | Ramseier et al., "Cloning of a DNA region from Bradyrhizobium-japonicum encoding pleiotropic functions in the heme metabolism and respiration," <i>Arch. Microbiol.</i> , 1989, 151: 203-212.             |

| EXAMINER | DATE       |
|----------|------------|
|          | CONSIDERED |

| FORM PTO-1449 (modified)                      |             | Atty. Ref. No. 072377-0372585 |                      |
|-----------------------------------------------|-------------|-------------------------------|----------------------|
| SUPPLEMENTAL INFORMA<br>STATEMENT BY APPLICAN |             | Applicant: HEIFE              | TZ, et al.           |
|                                               |             | Application No.: 1            | 0/625,648            |
|                                               |             | Filing Date: July 2           | 23, 2003             |
| Date: November 13, 2009                       | Page 4 of 4 | Examiner:<br>LUNDGREN         | Group Art Unit: 1639 |

|   |     | Ruhlman et al., "Expression of cholera toxin B-proinsulin fusion protein in lettuce and tobacco chloroplasts – oral administration protects against development of insulitis in non-obese diabetic mice," <i>Plant Biotech. J.</i> , 2007, 5: 495-510. |
|---|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| * | D44 | Ruf et al., "Stable genetic transformation of tomato plastids and expression of a foreign protein in fruit," <i>Nat. Biotechnol.</i> , 2001, 19: 870-875.                                                                                              |
| * | D45 | Sasarman et al., "Mapping of a new hem gene in Escherichia coli K-12," <i>J. Gen. Microbial.</i> , 1979, 113: 297.                                                                                                                                     |
| * | לל  | Washington, D.C                                                                                                                                                                                                                                        |
| * |     | Shaver et al., "Changes in chloroplast DNA during development in tobacco, <i>Medicago truncatula</i> , pea, and maize," <i>Planta</i> , 2006, 224: 72–82.                                                                                              |
| * | D48 | Sidorov et al., "Stable chloroplast transformation in potato: use of green fluorescent protein as a plastid marker," <i>Plant Journal</i> , 1999, 19(2): 209-216.                                                                                      |
| * | D49 | Untranslated Region of the psbA mRNA," <i>EMBO J.</i> , 1993, 12: 601-606.                                                                                                                                                                             |
| * |     | Stemmer et al., "Rapid evolution of a protein in vitro by DNA shuffling," <i>Nature</i> , 1994, 370: 389-391.                                                                                                                                          |
| * | D51 | Svab et al., "Stable transformation of plastids in higher plants," <i>Proc. Natl. Acad. Sci., USA</i> , 1990, 87: 8526-8530.                                                                                                                           |
| * |     | Yanase et al., "Porphyrin Synthesis Involvement in Diphenyl Ether-Like Mode of Action of Tnpp-Ethyl a Novel Phenylpyrazole Herbicide," <i>Pesticide Biochemistry and Physiology</i> , 1989, 35: 70-80.                                                 |
| * | D53 | Zhao et al., "Molecular evolution by staggered extension process (StEP) in vitro recombination," <i>Nature Biotechnology</i> , 1998, 16: 258-261.                                                                                                      |
| * |     | Zoschke et al., "From cotyledon to mature plant: Arabidopsis plastidial genome copy number, RNA accumulation and transcription are differentially regulated during leaf development," <i>Plant J.</i> , 2007, 50: 710–722.                             |
|   | D55 | Zubko et al., "Stable transformation of petunia plastids," <i>Transgenic Res.</i> , 2004, 13: 523-530.                                                                                                                                                 |

| EXAMINER | DATE<br>CONSIDERED |
|----------|--------------------|
|----------|--------------------|